



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Machine Id
CUMMINS 8464140
 Component
Diesel Engine
 Fluid
MOBIL DELVAC 1300 SUPER 15W40 (--- GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		RPL0021263	RPL0019433	RPL0016801
Sample Date		Client Info		04 Jun 2024	14 Mar 2024	07 Dec 2023
Machine Age	mls	Client Info		323013	317832	312074
Oil Age	mls	Client Info		0	14196	312074
Filter Age	mls	Client Info		0	14196	0
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Not Changd	Not Changd
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>90	17	13	4
Chromium	ppm	ASTM D5185m	>20	2	1	<1
Nickel	ppm	ASTM D5185m	>2	<1	0	<1
Titanium	ppm	ASTM D5185m	>2	0	0	0
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	4	2	2
Lead	ppm	ASTM D5185m	>40	<1	<1	0
Copper	ppm	ASTM D5185m	>330	2	1	<1
Tin	ppm	ASTM D5185m	>15	<1	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

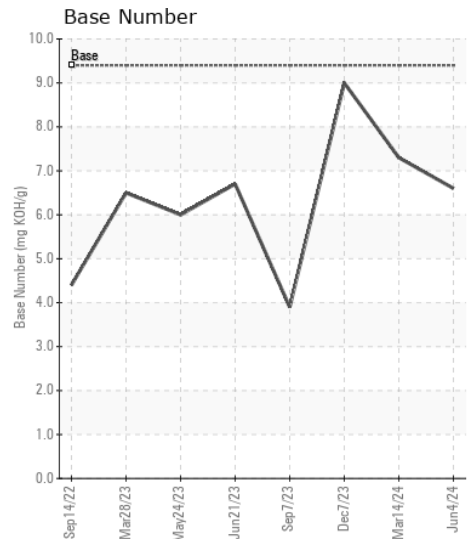
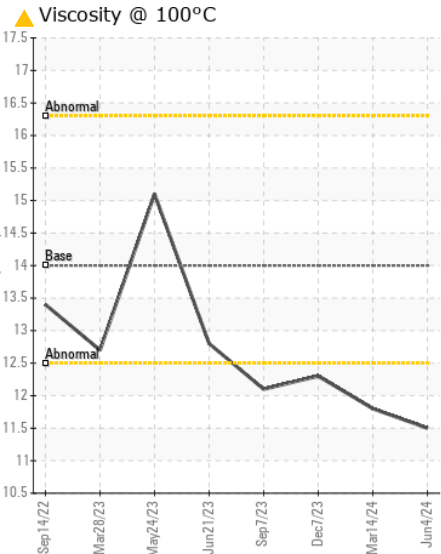
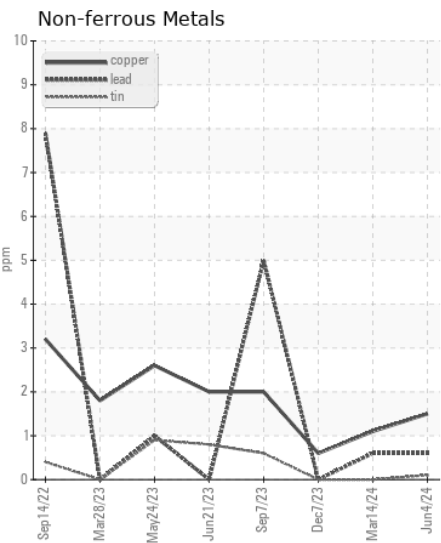
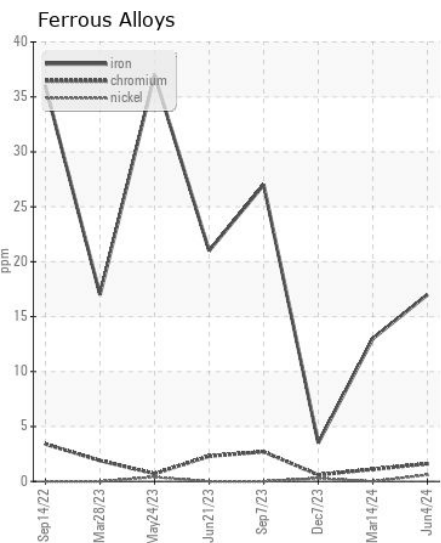
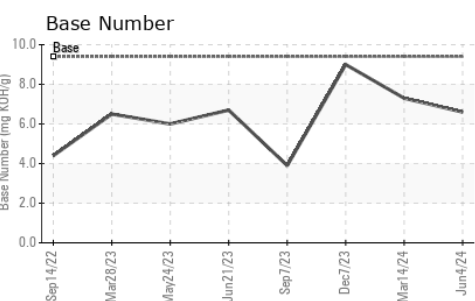
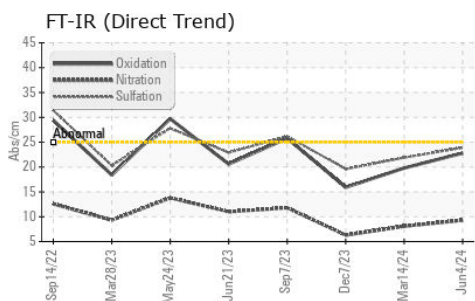
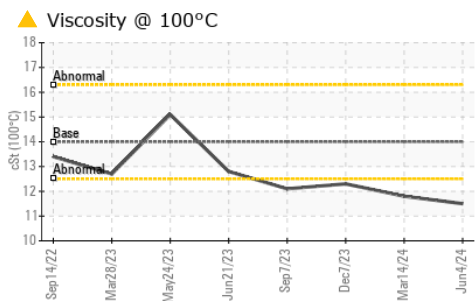
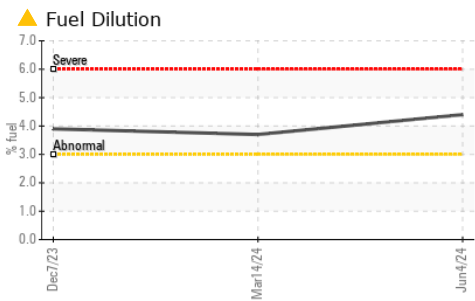
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185m	>25	6	5	3
Potassium	ppm	ASTM D5185m	>20	8	3	4
Fuel	%	ASTM D3524	>3.0	▲ 4.4	▲ 3.7	▲ 3.9
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>6	0.4	0.3	0.2
Nitration	Abs/cm	*ASTM D7624	>20	9.3	8.1	6.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.9	21.9	19.6
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m		4	1	1
Boron	ppm	ASTM D5185m	0	4	1	2
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	57	60	53
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m	0	906	1030	901
Calcium	ppm	ASTM D5185m		1030	1124	962
Phosphorus	ppm	ASTM D5185m		996	1080	964
Zinc	ppm	ASTM D5185m		1203	1311	1219
Sulfur	ppm	ASTM D5185m		3520	3880	3157
Oxidation	Abs/.1mm	*ASTM D7414	>25	22.8	19.8	15.9
Base Number (BN)	mg KOH/g	ASTM D2896	9.4	6.6	7.3	9.0
Visc @ 100°C	cSt	ASTM D445	14	▲ 11.5	▲ 11.8	▲ 12.3



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RPL0021263 **Received** : 17 Jun 2024
Lab Number : 06211474 **Tested** : 19 Jun 2024
Unique Number : 11084338 **Diagnosed** : 19 Jun 2024 - Wes Davis
Test Package : FLEET (Additional Tests: PercentFuel)

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Certificate L2367
 To discuss this sample report, contact Customer Service at 1-800-237-1369.
 * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)